

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF CALIFORNIA

CYNTHIA L. CZUCHAJ, individually  
and on behalf of all others similarly  
situated, et al.,

Plaintiffs,

v.

CONAIR CORPORATION, a Delaware  
corporation,

Defendant.

Case No.: 3:13-cv-01901-BEN-RBB

**ORDER:**

**(1) DENYING DEFENDANT'S  
MOTION TO EXCLUDE  
PLAINTIFFS' EXPERT PHIL VAN  
HERLE; and**

**(2) DENYING PLAINTIFFS'  
MOTION TO EXCLUDE EXPERT  
OPINION TESTIMONY OF  
ROBERT A. CARNAHAN**

**[Docket Nos. 296, 320]**

The parties have filed competing motions to exclude opinion testimony from the other's engineering expert under Federal Rule of Evidence 702. Defendant Conair Corporation seeks to exclude Plaintiffs' expert Phil Van Herle. (Def.'s Mot. [ECF No. 296].) Plaintiffs seek to exclude portions of the testimony of Defendant's expert Robert Carnahan. (Pls.' Mot. [ECF No. 320].) For the reasons stated below, both motions are **DENIED**.

///

## BACKGROUND

This certified class action arises out of Defendant's sales of its Infiniti Pro 1875 Watt model 259/279<sup>1</sup> hair dryer. Plaintiffs allege that there are two defects in the hair dryer. First, they allege that the strain relief to the power cord of the hair dryer had a tendency to cause the power cord to fail, resulting in the expulsion of sparks and molten metal particles that presented a fire hazard and burn risk ("cord defect"). (Pls.' Mot. at 1.) Second, they contend that the hair dryer's heater coils "sawed" through their mica support boards inside the barrel of the hair dryer, eventually coming into contact and short-circuiting, resulting in coils breaking and discharging from the barrel, which also presented a fire hazard and burn risk ("coil defect"). (*Id.*)

The parties each retained their own respective engineering experts to proffer opinions related to these alleged defects. Plaintiffs retained Phil Van Herle of 4X Forensic Engineering Laboratories. Defendant retained Robert Carnahan of Exponent Failure Analysis Associates. The experts have produced expert reports required by Federal Rule of Civil Procedure 26 and have been deposed.

Each party has now filed a motion to exclude the testimony of the other's expert, contending that the opinions are inadmissible under Rule 702, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999).

## LEGAL STANDARD

Under Rule 702, a witness who is qualified as an expert "by knowledge, skill, experience, training or education" may testify if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

---

<sup>1</sup> The model 279 is the same hair dryer as the model 259. (Class Cert. Mot. at 2 [ECF No. 156].) The Court refers to the hair dryer as "model 259" for consistency.

- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. Under Rule 702, expert testimony must be both relevant and reliable. *Kumho Tire Co.*, 526 U.S. at 149; *Daubert*, 509 U.S. at 589. In evaluating proffered expert testimony, the trial court is “a gatekeeper, not a fact finder.” *Primiano v. Cook*, 598 F.3d 558, 565 (9th Cir. 2010).

With respect to relevance, there must be a “valid scientific connection to the pertinent inquiry” for Rule 702’s helpfulness standard to be met. *Daubert*, 509 U.S. at 592.

With respect to reliability, the Court must make a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology can be applied to the facts in issue. *Id.* at 592-93. In *Daubert*, the Supreme Court listed several factors that *may* be pertinent in assessing reliability: (1) whether the scientific theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review or publication; (3) whether there is a known or potential error rate; and (4) whether the theory or technique is generally accepted in the relevant scientific community. *Id.* at 593-94. But the inquiry under Rule 702 is a “flexible” one, and the district court has “discretionary authority . . . to determine reliability in light of the particular facts and circumstances of the particular case.” *Kumho Tire*, 526 U.S. at 158. Accordingly, “the factors identified in *Daubert* may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert’s particular expertise, and the subject of his testimony.” *Id.* at 150 (noting that the *Daubert* factors may not always apply to engineering testimony).

“Shaky but admissible evidence is to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not exclusion.” *Primiano*, 598 F.3d at 564 (citation omitted). The district judge is “supposed to screen the jury from unreliable

nonsense opinions, but not exclude opinions merely because they are impeachable.”  
*Alaska Rent-A-Car, Inc. v. Avis Budget Grp., Inc.*, 738 F.3d 960, 969 (9th Cir. 2013).  
 Simply put, “[t]he district court is not tasked with deciding whether the expert is right or  
 wrong, just whether his testimony has substance such that it would be helpful to a jury.”  
*Id.* at 969–70. When an expert meets the threshold established by Rule 702 as explained  
 by the Supreme Court in *Daubert* and its progeny, the expert may testify and the jury  
 decides how much weight to give that testimony. *Primiano*, 598 F.3d at 565.

## DISCUSSION

The Court addresses each party’s motion in turn.

### **I. Defendant’s Motion to Exclude Phil Van Herle**

Plaintiffs retained Mr. Van Herle to “investigate and examine two design defects  
 reported to be common” to Conair’s Infiniti Pro model 259 hair dryer—the cord defect  
 and the coil defect. (Def.’s Mot., Ex. A, Pls.’ Prelim. Eng’g Analysis at 2.) According  
 to Mr. Van Herle, he was asked “to conduct a forensic failure analysis of the Subject  
 Hair Dryer to attempt to ascertain the existence of product defects that accounted for the  
 product’s failure.” (Pls.’ Opp’n [ECF No. 304], Van Herle Decl. ¶ 14.)

Based on his examination and testing, he proffered two opinions. First, as to the  
 cord defect, Mr. Van Herle opines:

[Defendant had a] defect[] with the design of the prior generation of strain  
 relief cord bushing. The prior generation strain relief cord bushing was stiffer,  
 shorter and allowed for excessive twisting of the cord. The combination of  
 these design defects results in a cord that can be highly stressed when flexed  
 or twisted about the strain relief cord bushing. Such stress leads to a failure  
 of the cord wires and electrical insulation [which can cause] the electrical  
 conductor [to] arc and expel sparks and molten metal particles that present a  
 burn injury and fire hazard.

(Pls.’ Prelim. Eng’g Analysis at 18.)

With respect to the coil defect, Mr. Van Herle was asked to “ascertain whether  
 the coil defect admitted by [Defendant] to exist in its ‘Neumax’ edition of the Subject  
 Hair Dryer also co-existed in the ‘Silver Plan’ and ‘Sun Luen’ editions.” (Van Herle

Decl. ¶ 16.) Mr. Van Herle opined that the Neumax, Silver Plan, and Sun Luen editions all exhibited “evidence of vibration induced heating coil-to-mica support wear.” (Pls.’ Prelim. Eng’g Analysis at 19; Def.’s Mot., Ex. B, Pls.’ Suppl. Eng’g Analysis at 18.) That is, “vibration generated by the spinning motor and fan wheel assembly . . . caused the heater coils to oscillate which then in turn abrade[d] into the mica support plates.” (Pls.’ Suppl. Eng’g Analysis at 16.) He then opined that the mica wear led to, or would have eventually led to, the coils touching and short-circuiting, resulting in arcing and overheating of the dryer heating coils. (*Id.* at 18.) “Such failures could result in burn injuries, fire and/or electrical shock.” (*Id.*) He ultimately opined that the high vibration values, mica wear, and close spacing of the heater coils were design features common to all editions, whether manufactured by Neumax, Silver Plan, or Sun Luen. (*Id.* at 18-19.)

Defendant raises two issues in its motion. First, it argues that Mr. Van Herle is not qualified to testify about the alleged cord and coil defects. Second, it contends that Mr. Van Herle’s opinions are not reliable because they are based on flawed or inadequate testing. Each of these arguments is addressed below.

#### **A. Mr. Van Herle’s Qualifications**

Defendant argues that Mr. Van Herle is not qualified to testify because he is a “fire investigation expert, not a hair dryer design expert.” (Def.’s Mot. at 2.) They contend that Mr. Van Herle’s work experience “almost exclusively consists of the investigation of the origin and cause of structural fires,” and that he has “no experience in designing a hair dryer or home grooming appliance, has not worked in the home grooming appliance industry, has no experience in testifying about design defects of hair dryers, and has no training or investigation of hair dryer design.” (*Id.* at 3, 7-8.)

The Court believes that Defendant’s argument goes too far. Experts are not required to have previous experience with the product at issue; rather, they must be qualified to testify by “by knowledge, skill, experience, training or education.” *See Myrick v. U.S. Saws, Inc.*, No. C11-1837Z, 2013 WL 766192, at \*4 (W.D. Wash. Feb.

28, 2013) (quoting Fed. R. Evid. 702). In its Reply brief, Defendant concedes “specific experience (in this case, hair dryer design) is not required,” but it argues that “other relevant and specific experience is still required” and Mr. Van Herle does not possess these qualifications. (Def.’s Reply at 4 [ECF No. 311].) The Court disagrees.

The Court finds that Mr. Van Herle is qualified to testify about the alleged defects based on his education, training, and experience. Mr. Van Herle holds a bachelor’s degree in mechanical engineering and is a licensed professional engineer. (Def.’s Mot., Ex. E, Van Herle Curriculum Vitae.) For the past sixteen years, he has “specialized in the performance of forensic engineering failure analyses in order to ascertain the existence of defects of both consumer and commercial products due to a wide variety of causes.” (Van Herle Decl. ¶ 6.) As Mr. Van Herle explained in his deposition, “forensic engineering is the engineering study of failures after they occur, going through the evidence and piecing together what occurred.” (Pls.’ Opp’n, Beligan Decl., Ex. 1, Van Herle Dep. at 99:7-11.) Mr. Van Herle explains that he has applied the same basic principles of forensic engineering in every case over this sixteen-year period, including this one. (Van Herle Decl. ¶¶ 7, 14.) His prior cases have involved examination of common consumer appliances such as dishwasher, dryers, electrical fans, refrigerators, and electrical power strips. (*Id.* ¶ 9.) Mr. Van Herle has also presented about forensic engineering analysis of product failures numerous times. (Van Herle Curriculum Vitae.) Notably, one of his presentations, entitled “How to Conduct a Consumer Product Recall Investigation,” concerned his work on a product that failed because of a defective power cord. (Van Herle Decl. ¶ 7) His work led to the recall of approximately 2.2 million fans with the defective cord. (*Id.*) This background and experience is sufficient to meet the requirements of Rule 702. Mr. Van Herle is qualified to testify about his forensic failure analysis of the hair dryers at issue here.

### **B. The Reliability of Mr. Van Herle’s Opinions**

Defendant next attacks the reliability of Mr. Van Herle’s opinions. As to Mr. Van Herle’s opinion on the cord defect, it contends that he arrived at that opinion based



1 only on his visual observations without conducting any scientific or mathematical  
2 testing or analysis and without performing any research. Defendant points out that  
3 there is a known industry protocol to test line cords and strain reliefs, but Mr. Van Herle  
4 chose not to perform that test. Rather, according to Defendant, Mr. Van Herle “made  
5 up” a test days before his deposition. Further, in Mr. Van Herle’s Declaration  
6 submitted with Plaintiffs’ Opposition to this motion, Mr. Van Herle belatedly offers  
7 mathematical formulas to support his opinion. Defendant contends that, despite this  
8 belated attempt to justify his opinion, there “is nothing testable or subject to peer review  
9 to demonstrate that Mr. Van Herle’s methodology is generally accepted within the  
10 scientific community.” (Def.’s Reply at 6.)

11 Much of Mr. Van Herle’s testimony appears to be based on his knowledge and  
12 experience in his discipline and is supported by “[s]tandard engineering equations.” (Van  
13 Herle Decl. ¶ 27.) In such cases, the *Daubert* factors (peer review, publication, potential  
14 error rate, etc.) are not always applicable. *See Thermolife Int’l, LLC v. Myogenix Corp.*,  
15 No. 13-CV-651 JLS (MDD), 2016 WL 3952128, at \*3 (S.D. Cal. July 22, 2016); *see also*  
16 *Kumho Tire*, 526 U.S. at 150 (“Engineering testimony rests upon scientific foundations,  
17 the reliability of which will be at issue in some cases. In other cases, the relevant  
18 reliability concerns may focus upon personal knowledge or experience.”). Mr. Van Herle  
19 states that there is “no industry test to adequately ascertain the type of cord strain” at  
20 issue here, and he explained in his deposition why he did not test the cords using the  
21 supposed industry protocol noted by Defendant. (Van Herle Decl. ¶¶ 25, 26.) Therefore,  
22 Mr. Van Herle performed his own test using “basic well-established engineering theory  
23 and equations.” *See Kumho Tire*, 526 U.S. at 151 (“It might not be surprising in a  
24 particular case, for example, that a claim made by a scientific witness has never been the  
25 subject of peer review.”); (Van Herle Decl. ¶ 26.) Although the Court recognizes  
26 weaknesses in Mr. Van Herle’s opinion, those weaknesses go to the weight to be given to  
27 his testimony. The Court finds that Mr. Van Herle’s testimony about the cord defect is  
28 sufficiently reliable to satisfy Rule 702.

1 Defendant's second argument relates to the reliability of Mr. Van Herle's opinion  
 2 on the coil defect. To reach his opinion that excessive vibration in the hair dryers caused,  
 3 or would have eventually caused, the hair dryer coils to short circuit, Mr. Van Herle used  
 4 an accelerometer (known as a vibration sensor) to test the hair dryers. Defendant argues  
 5 that the vibration results are unreliable because Mr. Van Herle did not properly secure the  
 6 accelerometer to the hair dryer. It further argues that there is "no mathematical analysis  
 7 or scientific evidence that a vibrating hair dryer equates to coils ejecting from the hair  
 8 dryer." (Def.'s Mot. at 13.)

9 The Court again finds that Defendant's arguments go to the weight of Mr. Van  
 10 Herle's testimony and not its admissibility. With respect to Defendant's contention that  
 11 the accelerometer should have been screwed to the hair dryer according to the  
 12 manufacturer's instructions, Mr. Van Herle has explained why he thought screwing the  
 13 accelerometer would be improper. (Def.'s Mot., Ex. C, Pls.' Suppl./Rebuttal Eng'g  
 14 Analysis at 4; Van Herle Decl. ¶ 23.) Furthermore, Mr. Van Herle stated that the  
 15 vibration levels noted during the joint testing—in which Mr. Van Herle supposedly  
 16 improperly mounted the accelerometer—did not vary from the vibration levels noted  
 17 during testing with a separate vibration sensor mount recommended by Defendant's  
 18 engineering expert. (Pls.' Suppl./Rebuttal Eng'g Analysis at 2-5.) Therefore, the Court  
 19 is not persuaded that Mr. Van Herle's method of testing is unreliable.

20 As to Defendant's second objection concerning the lack of mathematical or  
 21 scientific analysis, Defendant misunderstands the purpose of Mr. Van Herle's testing.  
 22 Defendant contends that the purpose of the accelerometer testing was to replicate testing  
 23 performed by Defendant to show similarities in the vibration levels between the Neumax  
 24 edition and the Silver Plan and Sun Luen editions. (Pls.' Opp'n at 16.) Because  
 25 Defendant's "own September 27, 2013 FFA had already conclusively established the  
 26 existence of a [vibration-induced] defect in one edition of the Subject Hair Dryer, . . . Mr.  
 27 Van Herle's assignment was to merely ascertain if the same defect also afflicted other  
 28 editions in the class." (*Id.* at 15.) Given this purpose, the Court is not convinced that



1 further mathematical or scientific testing was required to render Mr. Van Herle's  
 2 opinions sufficiently reliable to satisfy Rule 702. Defendant is free to cross-examine Mr.  
 3 Van Herle at trial to identify the weaknesses in his opinions and to offer its own expert's  
 4 opinions to rebut Mr. Van Herle. As noted above, the district court should "not exclude  
 5 opinions merely because they are impeachable." *Alaska Rent-A-Car, Inc.*, 738 F.3d at  
 6 969.

7 Therefore, the Court finds that Mr. Van Herle is qualified to testify about his  
 8 opinions and such opinions are reliable. Because the Court has ordered that Defendant  
 9 may depose Mr. Van Herle again, Defendant's request to exclude Mr. Van Herle's  
 10 second supplemental expert report as untimely is moot. (Status Hr'g Tr. 26:6-17 Aug. 9,  
 11 2016 [ECF No. 339].)

## 12 **II. Plaintiffs' Motion to Exclude Robert Carnahan**

13 Defendant retained Mr. Carnahan as a rebuttal expert to critique the opinions of  
 14 Mr. Van Herle. (Def.'s Opp'n at 1 [ECF No. 333].) Accordingly, Mr. Carnahan was  
 15 present at Plaintiffs' destructive testing of the hair dryers; reviewed and analyzed the  
 16 samples, data, and results of the testing; and then critiqued the methodology, reliability,  
 17 and conclusions proffered by Mr. Van Herle. (*Id.*) Mr. Carnahan offers opinions  
 18 attributing the hair dryer failures to reasons other than defects in the power cord  
 19 bushing or mica board wear, such as consumer abuse. (Pls.' Mot., Ex. 1, Def.'s Eng'g  
 20 Rpt. at 81-82.) He also contends that Mr. Van Herle's testing is unreliable and that the  
 21 evidence does not support his opinion that certain units likely would have failed from  
 22 coil defects. (*Id.* at 81.)

23 Plaintiffs seek to exclude certain opinions of Mr. Carnahan that are phrased in  
 24 terms of "may have" or "may result." They argue that these causation opinions "fall  
 25 fatally short of the minimal threshold of non-speculation, *i.e.*, more probable than not,"  
 26 and therefore are "inadmissible speculation as a matter of well-settled substantive  
 27 California law." (Pls.' Mot. at 4.) Consequently, Plaintiffs contend that "as a result of  
 28 the mandatory exclusion of Mr. Carnahan's impermissibly speculative opinions,

1 coupled with his unexplained failure to conduct any testing, Mr. Carnahan's derivative  
 2 opinions dependent on such speculation and/or lack of testing are equally fatally  
 3 inadmissible." (*Id.* at 5.) In sum, Plaintiffs ask the Court to exclude six of Mr.  
 4 Carnahan's opinions related to the coil defect.

5 Plaintiffs' motion ignores that they carry the ultimate burden of proving the alleged  
 6 defects in this case. Mr. Carnahan is a rebuttal expert and, as such, he need not offer an  
 7 ultimate opinion about what caused the hair dryer failures. *See Cmty. Ass'n for*  
 8 *Restoration of the Env't, Inc. v. Cow Palace, LLC*, 80 F. Supp. 3d 1180, 1215 (E.D.  
 9 Wash. 2015) ("[Defendants' rebuttal expert] need not develop alternative, affirmative  
 10 opinions in order to adequately rebut the evidence presented by Plaintiffs—that is not  
 11 Defendants' burden."). The specific opinions that Plaintiffs seek to exclude concern Mr.  
 12 Carnahan's opinions criticizing Mr. Van Herle's coil defect opinions and testing  
 13 procedures. Mr. Carnahan was not required to conduct his own testing. Fed. R. Evid.  
 14 703 ("An expert may base an opinion on facts or data in the case that the expert has been  
 15 made aware of or personally observed."). He observed the testing and received Mr. Van  
 16 Herle's samples and data. Based on his review of this information, considered in light of  
 17 his experience, knowledge, and education, Mr. Carnahan reached a contrary opinion.<sup>2</sup>  
 18 This is proper rebuttal and satisfies the requirements of Rule 702. *See Primiano*, 598  
 19 F.3d at 565 ("Expert opinion testimony is relevant if the knowledge underlying it has a  
 20 valid connection to the pertinent inquiry. And it is reliable if the knowledge underlying it  
 21 has a reliable basis in the knowledge and experience of the relevant discipline.")  
 22 Therefore, the Court will not exclude Mr. Carnahan's opinions.

23 Plaintiffs also seek to preclude Mr. Carnahan from offering opinions on particular  
 24 issues that they contend he expressed no opinion on in his Rule 26 Report. (Pls.' Mot. at  
 25 9-10.) The Court denies Plaintiffs' request. Several of the identified topics are vaguely  
 26

---

27  
 28 <sup>2</sup> The Court notes that Plaintiffs do not challenge Mr. Carnahan's qualifications.

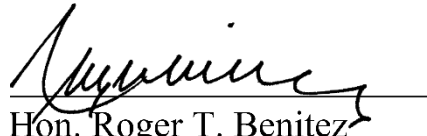
worded such that it is unclear what sort of testimony Plaintiffs are seeking to exclude. (*See, e.g.*, Pls.' Mot. at 9, Topics 2, 4, 5.) Other topics concern information set forth in corporate documents and the documents speak for themselves. (*See, e.g., id.* at 9-10, Topics 1, 3, 6.) Furthermore, Mr. Carnahan expressed opinions about some of the topics or was not required to offer opinions on certain topics. (*See, e.g., id.*, Topics 2, 7, 8, 9.) Finally, Plaintiffs' request is moot because the Court has re-opened expert discovery and is allowing Plaintiffs to depose Mr. Carnahan again. (Status Hr'g Tr. 26:6-17 Aug. 9, 2016.)

### CONCLUSION

The Court finds that each party's engineering expert satisfies the requirements of Rule 702 and may testify at trial. Therefore, both motions are **DENIED**. (ECF Nos. 296, 320.)

**IT IS SO ORDERED.**

Dated: August 19, 2016

  
Hon. Roger T. Benitez  
United States District Judge